

Title (en)

Method of route optimization with dual mobile node in IPV4-only network

Title (de)

Verfahren zur Routen-Optimierung mit einem mobilen Doppelprotokollgerät in einem nur-IPv4 Netz

Title (fr)

Procédé d'optimisation des routes avec un terminal mobile a double protocole dans un réseau uniquement IPv4

Publication

EP 1780977 A1 20070502 (EN)

Application

EP 06122884 A 20061024

Priority

- KR 20060085890 A 20060906
- IN 1552CH2005 A 20051026

Abstract (en)

A method of achieving route optimization (RO) when a dual capable mobile Internet protocol version 6 (MIPv6) mobile node is connected with an IPv4-only network allows RO of packets to traverse a shorter route than the default one through the home agent (HA) using bidirectional tunneling, and leads to better bandwidth utilization. The method of RO with a dual MIPv6 node in an IPV4-only network includes updating the HA with an IPv4 address of the MN and deregistering a binding update (BU) with a corresponding node (CN) via the HA; informing the CN about its IPv4 address and receiving the CN's IPv4 address in reply; checking reachability of the CN in its IPv4 address using an IPv6-in-IPv4 tunnel; and sending and receiving Ipv6 data packets to/from the CN using a v4 tunnel.

IPC 8 full level

H04L 29/06 (2006.01); **H04W 8/08** (2009.01); **H04W 40/34** (2009.01); **H04W 80/04** (2009.01)

CPC (source: EP KR US)

H04L 45/52 (2013.01 - EP US); **H04W 8/04** (2013.01 - KR); **H04W 8/082** (2013.01 - EP US); **H04W 8/26** (2013.01 - KR); **H04W 40/36** (2013.01 - KR); **H04W 88/06** (2013.01 - KR); **H04L 2212/00** (2013.01 - EP US); **H04W 40/34** (2013.01 - EP US); **H04W 80/04** (2013.01 - EP US); **H04W 80/045** (2013.01 - EP US)

Citation (search report)

- [E] WO 2006129136 A1 20061207 - ERICSSON TELEFON AB L M [SE], et al
- [A] US 2005008032 A1 20050113 - YAMAMOTO SHU [US], et al
- [X] RAJEEV KODALI NOKIA RESEARCH CENTER: "Mobile IPv4 Route Optimization Using Mobile IPv6 Return Routability", IETF STANDARD-WORKING-DRAFT, INTERNET ENGINEERING TASK FORCE, IETF, CH, 11 July 2005 (2005-07-11), XP015040607, ISSN: 0000-0004

Designated contracting state (EPC)

DE FR GB IT NL

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1780977 A1 20070502; **EP 1780977 B1 20081203**; CN 1972310 A 20070530; DE 602006003984 D1 20090115; KR 100739811 B1 20070713; KR 20070045088 A 20070502; US 2007258424 A1 20071108

DOCDB simple family (application)

EP 06122884 A 20061024; CN 200610171925 A 20061026; DE 602006003984 T 20061024; KR 20060085890 A 20060906; US 58591206 A 20061025